



TÜVRheinland®  
**CERT**  
ISO 9001

# LNG & NATURAL GAS SOLUTIONS

## Small & Mid Scale



GB-2016

**Meca-inox**  
BALL VALVES

**LNG**  
**Hub Storage**

**Small scale Shipping :**  
Bunkering (LNG)  
Vapor management (NG)

**Biomethane**  
**production**

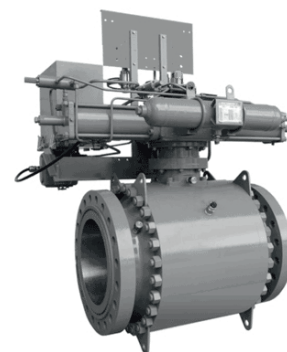
**Gas**  
**Treatment**

**Liquefaction**



## **Partners manufacturers for :**

- Cryogenic Top-Entry Valves up to 12"
- Side & Top-Entry Gas Valves up to 30"

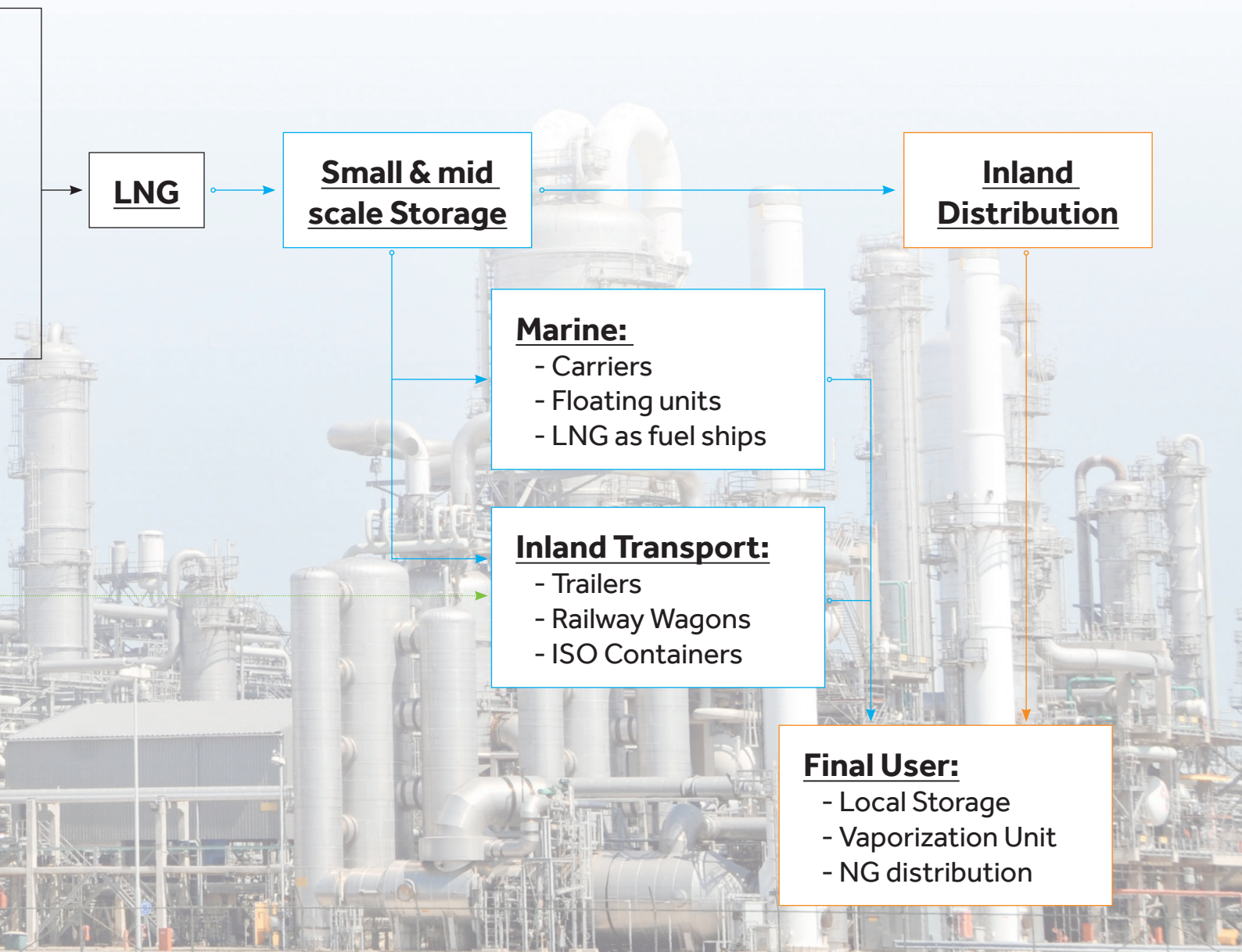


Expert in ball valves design and production technology since more than 50 years, Meca-Inox offers **Performant & Reliable, Robust & Durable, Adaptable & Innovative** solutions for stringent markets .

Based on 15 years experience in cryogenic ball valves for Industrial Gases, Meca-Inox is supplying LNG market high quality ball valves since 2010. Our range of LNG flow control solutions is covering low flow restriction manual and actuated isolating valves, 3-way diverting valves, multi valves skids, automatic shut-off valves and certified valves for transport and marine applications. Our ball valve solutions are dedicated to your cryogenic and gaseous fluids management with minimal pressure drop and optimized tightness.

**From production of gas to liquefaction, gas treatment to transport and vaporization, discover all our range of solutions for operations and maintenance**



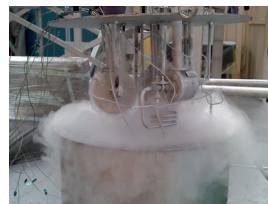


## PERFORMANCES & CERTIFICATIONS



### Strength & Tightness

EN 12266-1, ISO 5208,  
TA Luft (ISO15848-1)



### Functionnal Test

EN12266-1, EN1626,  
EN12567, BS6364



### Fire Resistance

ISO 10 497 API 607/ 6FA



### Cleaning

EN12300, EIGA33.06,  
Air Liquid standard

## 3 PIECE BALL VALVE FOR LNG – PY4CY SF



### DN08 to DN150 pipe size

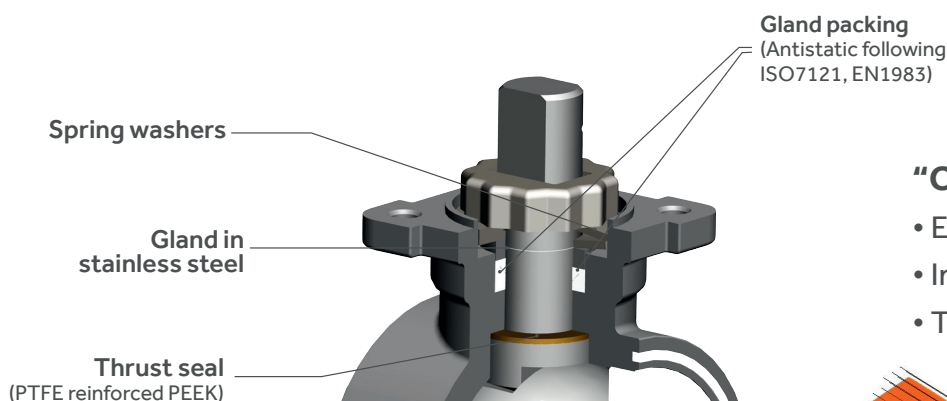
- 316L Stainless Steel Casting
- Body strength PN100 to PN25 (EN12266-1)
- Ball with upstream vent hole for liquid vaporization management
- Single piece machined extended stem & cryogenic stem

| Size Full bore | Valve PN | -196 °C Optimal Max ΔP | Extension (mm) |
|----------------|----------|------------------------|----------------|
| DN15           | 100 bar  | 40 bar                 | 200,4          |
| DN25           | 70 bar   | 40 bar                 | 248,4          |
| DN40           | 50 bar   | 40 bar                 | 294,7          |
| DN50           | 50 bar   | 40 bar                 | 311,4          |
| DN65           | 40 bar   | 40 bar                 | 361,2          |
| DN80           | 40 bar   | 10 bar                 | 373,2          |
| DN100          | 25 bar   | 10 bar                 | 398,0          |

### In House Ends Machining

- 316L & 3014L Stainless Steel
- All weld, threaded & flange designs

**EN12567 (A, B & E) Certified**  
**ISO 10497/API6FA/API6D Certified**



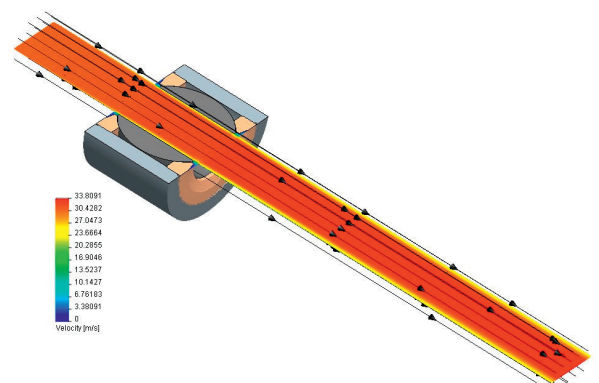
### “Class A” Tightness

- External Helium Leak < 10<sup>-5</sup> mbar.l.s-1
- Internal Helium Leak < 10<sup>-3</sup> mbar.l.s-1
- TA Luft Certified

### Low Pressure Drop

- 3 to 7 times lower than Globe Valves

**Minimum Environment Impacts**  
**Maximum Energy Savings**

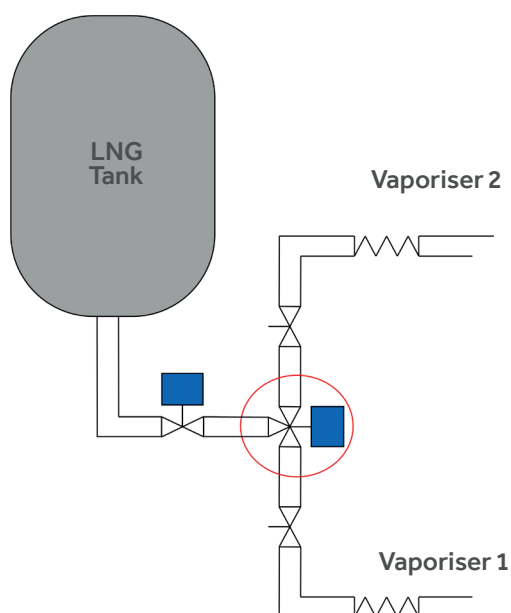






## 3 WAYS BALL VALVE FOR LNG – PY4CY 3VLH

Vaporiser Switch & LNG Distribution



**1 valve to replace 2**

## AUTOMATIC SHUT OFF – PY4CY Fire-Block

Emergency Isolation of Tank

- DN20 to DN50 pipe size
- Thermal Fuse actuation 90°C / 3 min
- Manual actuation by cable
- Compact Design
- Certified 1300 cycles before maintenance

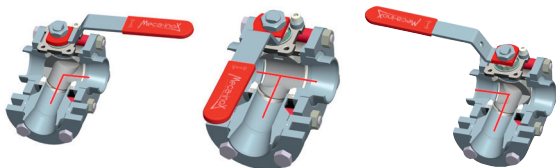
**Energy Free**  
**Automatic & Manual Actuation**



## 3 WAYS DIVERTOR for LNG VAPORS – PY4 3VTH

Safety Valve Isolation for Maintenance

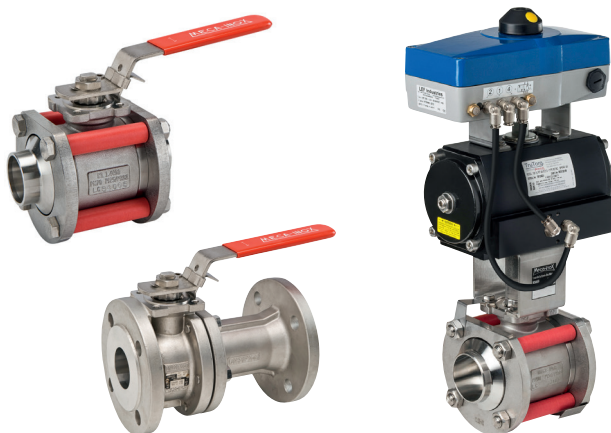
- DN20 to DN125 pipe size
- Ball with 1 entry & 2 exits
- Lockable lever
- Functional EN 12 567 / BS 6364



**High Tightness - Easy Actuation**  
**Low Flow Restriction**

## BALL VALVES FOR NATUREL GAS – PS4 & R2H

Industrial management of Natural Gas



- DN08 to DN200 pipe size
- 316L Stainless Steel Casting
- Body Strength PN100 to PN25
- All ends on demand (Butt Weld, Socket Weld, BSP & NPT thread...)
- "A Class" Tightness (EN12266-1)
- "TA Luft" Certified

**Reliable & Performant**  
**Technical & Flexible**





Driven by the **Emission Control Area (ECA)** for pollution reduction, LNG as fuel ships become an important stake for the LNG market.

Our project team put their **experience** and technical **knowledge** to meet the stringent requirements of LNG marine applications.

Based on ball valve technology, Meca-Inox designs low flow restrictions **solutions** and manages certification projects.

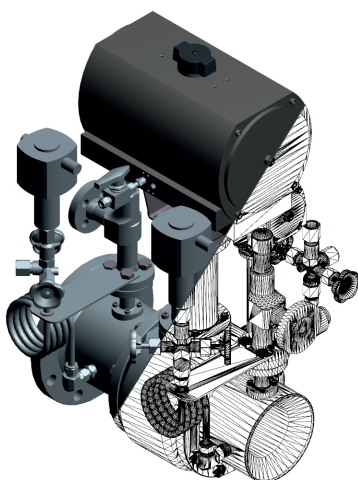


LNG Speed Boat

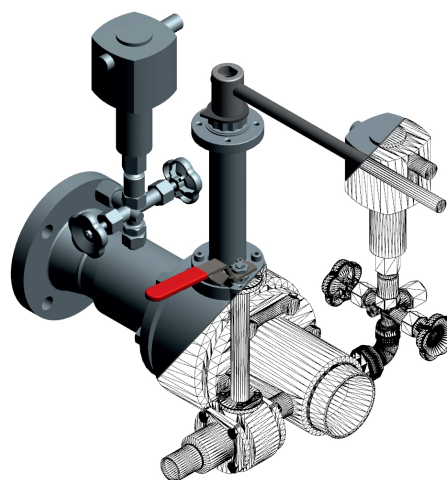
Designs certified by :



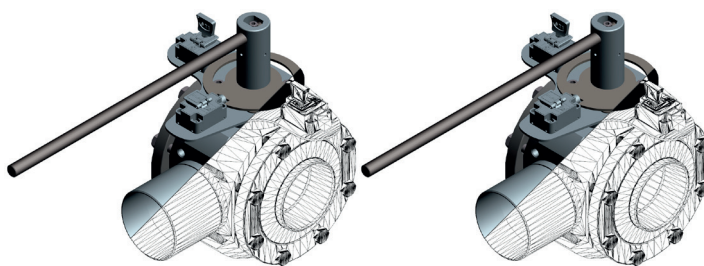
## Customized systems for LNG Marine applications



LNG Bunkering



LNG Vapor Return



LNG Vapor Double Divertor for Safety Vavles

**Dedicated team for project management,  
production and certification supervising.**

# Meca-inox

BALL VALVES

HIGH QUALITY BALL VALVES

BORN IN FRANCE, WORLDWIDE AVAILABLE



[meca-inox.com](http://meca-inox.com)

A BRAND OF GROUP

**Meca-inox**  
SINCE 1955